

CLAIMS

Claims 1-14 (canceled)

Claim 15 (previously presented): An article of manufacture, comprising:

- a) a first panel;
- b) a second panel adjoining the first panel;
- c) a sealant material that is free of a photoinitiator over the first panel and the second panel; the sealant material being at least partially cured prior to coating; the sealant material including:
 - i. an effective amount of an epoxy resin, the effective amount of epoxy resin being up to about 80% by weight of the sealant material,
 - ii. an effective amount of one or more rheology modifiers, the one or more rheology modifiers including an acrylate;
 - iii. an effective amount of a curing agent, an accelerator or both, the effective amount of the curing agent, the accelerator or both being up to about 7% by weight of the sealant material, the curing agent, the accelerator or both being selected from an cycloaliphatic amine or an amidoamine;
 - iv. a filler at least a portion of the filler being calcium carbonate; and
 - v. a hydrocarbon;
- d) a layer of primer over the sealant; and
- e) a layer of paint over the primer.

Claim 16 (previously presented): An article of manufacture, comprising:

- a) a first panel and a second panel of an automotive vehicle;
- b) a sealant material over the first panel and the second panel and being employed by itself and without any separately fabricated

support substrate; the sealant material being at least partially cured prior to coating; the sealant material including:

- i. an effective amount of an epoxy resin, the effective amount of epoxy resin being up to about 80% by weight of the sealant material,
- ii. an effective amount of an epoxy/elastomer hybrid, the effective amount of epoxy/elastomer hybrid being up to about 40% by weight of the sealant material, the epoxy/elastomer hybrid having about 1:3 to 3:1 parts of epoxy to elastomer;
- iii. an effective amount of an rheology modifier other than an ethylene vinyl acetate and including an acrylic, the effective amount of rheology modifier being up to about 40% by weight of the sealant material;
- iv. an effective amount of a curing agent, the effective amount of curing agent being up to about 7% by weight of the sealant material, the curing agent including an amine; and
- v. about 40 to about 60 % of a mineral filler, wherein the sealant material is substantially free of a photoinitiator.

Claim 17 (previously presented): An article of manufacture, comprising:

- a) a first metal automotive vehicle panel selected from aluminum, steel or reinforced plastic;
- b) a second automotive vehicle panel selected from aluminum, steel or reinforced plastic adjoining the first panel;
- c) a sealant material that is substantially free of a photoinitiator; the sealant material being employed by itself and without any separately fabricated support substrate; over the first panel and the second panel; the sealant material being at least partially cured prior to coating and including:
 - i. about 10 to about 50 parts by weight of an epoxy resin;

- ii. an effective amount of a rheology modifier, the effective amount of rheology modifier including an acrylate;
 - iii. an effective amount of curing agent, the effective amount of curing agent being up to about 7 parts by weight the sealant and including an amine;
 - iv. about 40 to about 60 parts by weight of a filler;
 - v. a hydrocarbon; and
 - vi. an oxide;
- d) a layer of primer over the sealant material; and
 - e) a layer of paint over the primer.

Claim 18 (previously presented): The article of claim 15, wherein the sealant is substantially free of ethylene vinyl acetate.

Claim 19 (previously presented): The article of claim 16, wherein the sealant is substantially free of ethylene vinyl acetate.

Claim 20 (previously presented): The article of claim 17, wherein the curing agent is an amine.

Claim 21 (previously presented): The article of claim 16, wherein the epoxy resin is present in an amount of about 10 to about 50 % by weight, and the epoxy/elastomer hybrid is present in an amount of about 10 to about 30 %.

Claim 22 (previously presented): The article of claim 17, wherein the filler is a mineral filler.

Claim 23 (previously presented): The article of claim 15, wherein the sealant is self leveling at elevated temperatures for providing a smooth paintable surface.

Claim 24 (previously presented): The article of claim 16, wherein the sealant is self leveling at elevated temperatures for providing a smooth paintable surface.

Claim 25 (previously presented): The article of claim 17, wherein the sealant is self leveling at elevated temperatures for providing a smooth paintable surface.

Claim 26 (canceled)

Claim 27 (previously presented): The article of claim 15, wherein the curing agent is an a polyamine.

Claim 28 (canceled)

Claim 29 (previously presented): The article of claim 15, wherein the curing agent is selected from an aliphatic or aromatic amine or their respective adducts.

Claim 30 (previously presented): The article of claim 16, wherein the partial cure is effected using an acid cure for inducing homopolymerization on or within the material.

Claim 31 (previously presented): The article of claim 16, wherein the partial cure is effected using a liquid for effectuating the initiation of a condensation reaction.

Claim 32 (previously presented): The article of claim 16, wherein the epoxy/elastomer hybrid includes a blend of an epoxy and a thermoplastic elastomer.

Claim 33 (previously presented): The article of claim 16, wherein the epoxy/elastomer hybrid includes a blend of an epoxy and a mixture of a thermosetting elastomer and a thermoplastic elastomer.

Claim 34 (previously presented): The article of claim 15 wherein the acrylate is ethylene methacrylate.

Claim 35 (previously presented): The article of claim 17 wherein the acrylate is ethylene methacrylate.

Claim 36 (previously presented): The article of claim 17 wherein the sealant material is configured to cure in a paint or priming processing step.

Claim 37 (previously presented): The article of claim 36 wherein the first panel and the second panel form a ditch or channel in the automotive vehicle.

Claim 38 (previously presented): The article of claim 36 wherein the sealant material is dry to the touch.